REMARKS

In the January 30, 2008 Office Action, claims 19-26, 29-35 and 37-43 stand rejected in view of prior art. No other objections or rejections were made in the Office Action.

Status of Claims and Amendments

In response to the January 30, 2008 Office Action, Applicants have amended claims 19, 22, 35 and 42 as indicated above. Thus, claims 19-26, 29-35 and 37-43 are pending, with claims 19, 22, 35 and 42 being the only independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of above amendments and the following comments.

Interview Summary

On June 6, 2008, the undersigned conducted a personal interview with Examiner Jamie L. McGowan, who is in charge of the above-identified patent application, and Supervisory Patent Examiner Thomas B. Will, who is the supervisor of Examiner McGowan. Applicants wish to thank Examiner McGowan and Examiner Will for the opportunity to discuss the above-identified patent application during the interview of June 6, 2008.

During the interview, the undersigned explained one skilled in the art would ***not*** have been able to simply move the cooling module to the rear side of the bulldozer in view the reference directed to a truck (namely, U.S. Patent No. 6,793,028 to Pack), because there are several design and structural considerations that are specific to the bulldozers. Also, the undersigned presented several objective evidences (copies of the articles in Construction Equipment magazines) that show the bulldozer of the claimed invention is well received in the construction equipment field.

However, no agreement was reached during the interview of June 6, 2008.

Rejections - 35 U.S.C. § 103

In numbered paragraphs 1 and 2 of the Office Action, all of pending claims 19-26, 29-35 and 37-43 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the prior art shown in Figure 1 (hereinafter "Figure 1 bulldozer") of the present application in view of U.S. Patent No. 6,793,028 (hereinafter the "Pack patent") and further in view of U.S. Design Patent No. 483,043 to Akashima et al. (hereinafter "Akashima et al. patent"). In response, Applicants have amended independent claims 19 and 35 to clearly distinguish over the prior art of record. Moreover, Applicants have amended claims 22 and 42 to further distinguish over the prior art of record and to rewrite these claims in independent form.

First, Applicants respectfully assert one of ordinary skill in the art would ***not*** considered it obvious to modify the cooling module arrangement of the Figure 1 bulldozer in view of the Pack patent, which is directed to a truck. As stated in the Rule 132 Declaration of Masayuki Mukaino (hereinafter "Mukaino's Declaration") submitted herewith, one skilled in the art of cooling arrangement of the bulldozer would ***not*** look into a prior art reference disclosing a cooling arrangement for a truck because the arrangement of the cooling equipment in a bulldozer is ***completely different*** from the arrangement of the cooling equipment in a truck. More specifically, as discussed in Mukaino's Declaration, in the conventional bulldozers (e.g., the Figure 1 bulldozer), the cooling fan coupled to the radiator is directly connected to the engine, and thus, the cooling fan and the radiator cannot be disposed far away from the engine. Moreover, even if the cooling fan and the radiator can be somehow separated from the engine to be remotely driven by the engine, one of ordinary skill in the art would not consider placing the cooling module behind the cab because there is usually no space in the rear portion of the vehicle frame. The rear portion of the vehicle frame of the bulldozer is usually occupied by structural elements such as the transmission and the final gear. Therefore, one of ordinary skill in the art would not take the teaching of the Pack patent and apply it to the conventional bulldozer because placing the cooling module in the rear portion of the vehicle frame is not physically practical in the bulldozer. In other words, there are different design considerations that need to be considered when designing the cooling module of the bulldozer from when designing the cooling module of the truck.

Second, Applicants would like to point out the Pack patent, for which a patent application was filed in 1999, is assigned to the Caterpillar S.A.R.L., which is apparently a European subsidiary of Caterpillar Inc. As it is well known, Caterpillar Inc. also manufactures bulldozers. However, as discussed in the Mukaino's Declaration, to his knowledge, the arrangement of the cooling module disclosed in the Pack patent has never been applied to any model of the Caterpillar's bulldozers since the patent application matured in the Pack patent was filed more than 9 years ago. Also, as discussed in the Mukaino's Declaration, to his knowledge, none of the bulldozer manufactures has adapted the arrangement of the cooling module disclosed in the Pack patent in the bulldozers since the application matured in the Pack patent was first published over 6 years ago.

Third, Applicants herewith submit a copy of the article appeared in the Construction Equipment magazine (Exhibit A) which discusses the review of the Komatsu D51PX-22 bulldozer having the claimed features by Jim Schultheis, who is a professional operator with 40 years of experience. In the article, Mr. Schultheis states "[Komatsu D51PX-22] is the ***only*** tractor [he has] been on ***that lets you see the center of the blade***. Usually, the hood is in the way" (emphasis added). Furthermore, the Komatsu D51 bulldozer having the claimed features was selected as the first one to be introduced as one of the top 100 new products of

2007 in the December, 2007 issue of the Construction Equipment magazine and the Komatsu D51 bulldozer also made the cover of that issue (Exhibit B). This article points out the excellent blade visibility among other features of Komatsu D51 bulldozer, and states "[b]y moving the cooling package from under the hood to the rear of the machine, the company was able to steeply slope the hood, providing ***best-in-class blade visibility***" (emphasis added).

Applicants believe these objective evidences indicate that it would ***not*** have been obvious for one of ordinary skilled in the pertinent art to adapt the cooling module arrangement for the truck taught in the Pack patent to the bulldozer. Accordingly, the Figure 1 bulldozer and the Pack patent are not combinable to obtain the claimed arrangement, and thus, the conclusion of obviousness over the combination of the references is based on ***improper hindsight*** reasoning.

Moreover, assuming for the sake of argument that the Figure 1 bulldozer and the Pack patent were combinable, which is not true, the hypothetical combination of the references would still ***fail*** to disclose or suggest the arrangement of the bulldozer as now recited in independent claims 1, 22, 35 and 42.

Independent Claims 19 and 35

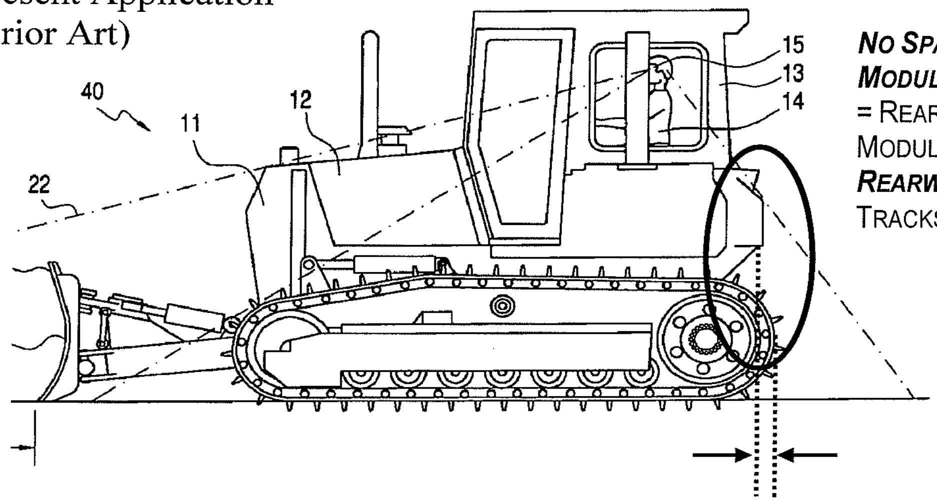
Independent claims 19 and 35 now recite the tracks extend rearwardly of the rear end of the vehicle frame ***to form a cooling module recess*** that is disposed laterally between the tracks and behind the rear end of the frame along the center longitudinal axis. More specifically, as discussed in the specification of the present application, the arrangement of the work vehicle in accordance with the claimed invention permits the cab to be shifted forward along the longitudinal center axis (please see, lines 5-12 on page 10 of the specification). Therefore, a cooling module recess is formed between the tracks and behind the rear end of the frame so that the cooling module is coupled to a rear end portion of the vehicle frame within the cooling module recess formed between the tracks. Applicants respectfully assert such a cooling module recess is ***not*** disclosed or suggested by the prior art of record. More specifically, as shown in the annotated version of the Figure 1 bulldozer as reproduced below, there is ***no space*** to form a cooling module recess between the tracks behind the rear end of the vehicle frame. Therefore, the hypothetical combination of the prior art references fails to disclose or suggest an arrangement in which the tracks extend rearwardly of the rear end of the vehicle frame ***to form a cooling module recess*** that is disposed laterally between the tracks and behind the rear end of the frame along the center longitudinal axis as now recited in independent claims 19 and 35.

Moreover, independent claims 19 and 35 now recite a ***rear most end of the cooling module*** is disposed ***forwardly*** of a ***rear end of the tracks***. Clearly, ***none*** of the Figure 1 bulldozer, the Pack patent, and the Akashima et al. patent discloses or suggests this arrangement.

More specifically, as clearly shown in the annotated version of the Figure 1 bulldozer as reproduced below, there is ***no space*** to put the cooling module between the rear end of the cab and the rear end of the tracks. Therefore, if one of ordinary skill in the art were to move the cooling module in the Figure 1 bulldozer to the rear portion of the vehicle in view of the Pack reference, which Applicants respectfully disagrees, the rear end of the cooling module would inevitably be disposed ***rearwardly*** of the rear end of the tracks. Moreover, ***none*** of the Figure 1 bulldozer, the Pack patent, and the Akashima et al. patent discloses or suggests an ***apparent reason*** for modifying the hypothetical combination to have the ***rear most end of the***

cooling module be disposed ***forwardly*** of the ***rear end of the tracks*** as now recited in independent claims 19 and 35.

FIG. 1 of
Present Application
(Prior Art)



No Space To Form ***Cooling Module Recess***
= Rear Most End Of Cooling Module Would Be Disposed ***Rearward*** Of Rear End Of Tracks

Accordingly, Applicants respectfully assert the limitations now recited in independent claims 19 and 35 are ***not*** disclosed or suggested by the prior art of record.

Independent claims 22 and 42

Independent claims 22 and 42 now recite the tracks extend rearwardly of the rear end of the vehicle frame ***to form a cooling module recess*** that is disposed laterally between the tracks and behind the rear end of the frame along the center longitudinal axis. As discussed above and shown in the annotated version of the Figure 1 bulldozer as reproduced above, there is ***no space*** to form a cooling module recess between the tracks behind the rear end of the vehicle frame in the Figure 1 bulldozer. Therefore, the hypothetical combination of the prior art references fails to disclose or suggest an arrangement in which the tracks extend rearwardly of the rear end of the vehicle frame ***to form a cooling module recess*** that is disposed laterally between the tracks and behind the rear end of the frame along the center longitudinal axis as now recited in independent claims 19 and 35.

Moreover, independent claims 22 and 42 now clearly recite the cooling module includes a radiator core having a ***charged air cooling unit*** (CAC), an ***oil cooling unit*** and a ***water cooling unit***. This amendment is fully supported by the original disclosure, for example, in lines 13-15 on page 6 of the specification and Figure 10. Applicants believe the radiator (the cooling core 32) of the Pack patent does ***not*** include at least the oil cooling unit, which is a relatively large component, because the oil cooling unit is not necessary for a truck.

Applicants believe one having ordinary skill in the art would ***not*** have considered it obvious to modify the arrangement of the radiator (including the CAC unit, the oil cooling unit and the water cooling unit) in the bulldozer in view of the Pack patent having a completely different radiator structure.

Accordingly, Applicants respectfully assert the limitations now recited in independent claims 22 and 42 are ***not*** disclosed or suggested by the prior art of record.

Dependent Claims

Applicants believe that the dependent claims clarify the scope of independent claims 19 and 35 as well as add novel features. For example, claims 20, 21, 41 and 43 clarify that independent claims 19 and 35 do not require a roof or cab, while claim 24 clarifies that independent claims 19 and 35 do not require the tracks to be of a separate module that is attached to the frame.

Accordingly, Applicants believe that the features of the dependent claims are also allowable over the prior art of record in that they depend from independent claims 19 and 35, and therefore, are allowable for the reasons stated above. Also, the dependent claims are further allowable because they include additional limitations. Thus, Applicants believe that since the prior art of record does not disclose or suggest the invention as set forth in independent claims 19 and 35, the prior art of record also fails to disclose or suggest the inventions as set forth in the dependent claims.

Therefore, Applicants respectfully request that this rejection be withdrawn in view of the above comments and amendments.

Prior Art Citation

In the Office Action, an additional prior art reference was made of record. Applicants believe that this reference does not render the claimed invention obvious.

* * *

In view of the foregoing amendment and comments, Applicants respectfully assert that claims 19-26, 29-35 and 37-43 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested.

Of course, if there are any questions, please feel free to contact the undersigned.

Respectfully submitted,

/David L. Tarnoff/
David L. Tarnoff
Reg. No. 32,383

GLOBAL IP COUNSELORS, LLP
1233 Twentieth Street, NW, Suite 700
Washington, DC 20036
(202)-293-0444
Dated: July 28, 2008

S:\06-JUN08-NT\KL-US050678 Amendment.doc